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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,962	10/10/2001	Hiroshi Hayashino	2001_1517A	6261

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EXAMINER

LY, ANH VU H

ART UNIT PAPER NUMBER

2667

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/972,962	Applicant(s) HAYASHINO ET AL.	
	Examiner Anh-Vu H. Ly	Art Unit 2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-15 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 5-10 and 16-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date October 4, 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 5, 12, and 13 are objected to because of the following informalities:

With respect to claim 5, in line 3, "the terminal" should be changed to - -the terminals- -.

With respect to claim 12, in line 6, "region" should be changed to

- -regions- -.

With respect to claim 13, in line 7, "an inquiry" should be changed to - -the inquiry- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 11-12, 14-15, and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsujimoto (US Patent No. 6,307,974 B1).

With respect to claims 1, 21, 22, and 23, Tsujimoto discloses a method for controlling communications among a plurality of terminals coupled to each other to form a network (Fig. 17) in which a mixture of isochronous data and anisochronous data is serially transmitted (Fig. 23), said method comprising:

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a step of dividing time into cycles, and providing an isochronous region and an anisochronous region for each cycle (Fig. 23);

a step of, after each terminal transmitting, for each cycle, the isochronous data using said isochronous region in a time division manner, determining by a destination terminal whether the isochronous data has been successfully received (col. 26, lines 37-40); and

a step of, when there is any terminal that has not successfully received the isochronous data, instructing an originating terminal of the isochronous data to retransmit the isochronous data using said anisochronous region (col. 27, lines 36-40).

With respect to claim 2, Tsujimoto discloses that wherein each terminal transmits the isochronous data with an error detection code added thereto, and the destination terminal checks the error detection code after receiving the isochronous data, and said determination step is performed based on a check result (col. 21, lines 53-59).

With respect to claim 3, Tsujimoto discloses that wherein each terminal transmits the isochronous data as divided into blocks and said determination step is performed for each block, and said instruction step is performed for each block (col. 21, lines 53-59, herein, each packet is considered as each data block).

With respect to claim 4, Tsujimoto discloses that wherein in said instruction step, when there are terminals that have not successfully received the isochronous data, the originating

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terminals of the isochronous data are sequentially instructed to retransmit the isochronous data using the anisochronous region in the time division manner (col. 27, lines 36-40).

With respect to claim 11, Tsujimoto discloses that dividing the isochronous region into dedicated regions, assigning the dedicated regions to the terminals respectively, and reporting, to each terminal, information about the dedicated region before a start of a head of the cycle, thereby enabling transmission of the isochronous data for each cycle by each terminal using said isochronous region in the time division manner (Fig. 23, IEEE standard).

With respect to claim 12, Tsujimoto discloses that dividing the isochronous region into dedicated regions, assigning the dedicated regions to the terminals respectively, and sequentially instructing, for each cycle at respective times corresponding to the dedicated regions, the terminals to transmit the isochronous data, thereby enabling transmission of the isochronous data for each cycle by each terminal using said isochronous region in the time division manner (Fig. 23, IEEE standard).

With respect to claim 14, Tsujimoto discloses that the destination terminal spontaneously gives a response about whether the isochronous data has been successfully received, and said determination step is carried out based on the response (col. 26, lines 47-55).

With respect to claim 15, Tsujimoto discloses that instructing step is carried out repetitively until the isochronous data is successfully received (col. 27, lines 39-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujimoto (US Patent No. 6,307,974 B1) in view of Tateyama (US Patent No. 6,018,816).

With respect to claim 13, Tsujimoto discloses an image processing using isochronous and asynchronous transmissions (Fig. 28). Tsujimoto does not disclose giving an inquiry to the destination terminal about whether the isochronous data has been successfully received, wherein the determination step is carried out based on a response to the inquiry. Tateyama discloses that an image data retransmission response is generated in response to the image data transmission request command which specifying retrying of the image data (col. 30, lines 23-26). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of inquiring the status of data transmission in Tsujimoto's system, as suggested by Tateyama, to increase transmissions reliability.

Allowable Subject Matter

4. Claims 5-10 and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Niida et al (US Pub 2003/0063601 A1) discloses a communication apparatus and method.


Duckwall et al (US Pub 2004/0246959 A1) discloses fly-by serial bus arbitration.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000
10/11/05